## ADDITIONS TO THE LIST OF MAINE MOLLUSCA.

BY N. W. LERMOND.

Since the publication of my Catalogue of the Mollusca of Maine in 1909, the following species and varieties, some new some old, have been added to the list:

Modiolaria substriata, Gray.

One young specimen of this species was collected by John A. Allen. It was attached to an old bottle in Portland Harbor, near Hope Island.

MACOMA TENTA, Say.

Four dead specimens were taken by the writer in Aug., 1909, in the Georges River, near Taylor's Point, Cushing Shore, in six fathoms, on a muddy bottom.

Specimens were submitted to Prof. Pilsbry for determination.

Odostomia (Menestho) bisuturalis ovilensis, Bartsch.

The type of this subspecies was taken by Henry W. Winkley in Sheepscott River, Lincoln County. See Bartsch's Pyramidellidæ of New England and Adjacent Region, p. 107.

TURBONILLA (PYRGISCUS) CASCOENSIS, Bartsch.

"The type and two additional specimens, Cat. no. 203,795 U.S. N.M., come from Casco Bay, Maine." See page 96 of Bartsch's Pyramidellidæ. Dr. Bartsch does not state when, or by whom, these specimens were collected.

CINGULA HARPA, --?

One specimen taken by Henry W. Winkley, at Eastport summer of 1913. Of this rare find, Mr. Winkley writes me as follows: "I think my identification correct. Formerly reported from 150-500 fathoms. I like to capture a stray bird now and then—it is fine sport."

COLUMBELLA (ASTYRIS) LUNATA Say.

Several live specimens of this species were dredged by Henry W. Winkley in the Sheepscott River at Damariscotta and by myself in Maple-juice Cove and Broad Cove, near mouth of the Georges River, Knox Co., during the summer of 1912. The latter locality is the most northern record for this species.

RETUSA OBTUSA VAR. TURRITA.

Reported by Mr. Dwight Blaney from Frenchman's Bay.

MUSCULIUM ROSACEUM Prime.

A few specimens (immature) taken by Dana W. Sweet in Sandy River, Franklin County, and by the writer in Georges River, North Warren, Knox County.

MUSCULIUM RYCKHOLTI Normand.

Fairly plentiful in the small ponds of Warren and Thomaston, Knox County.

MUSCULIUM PARVUM St (?).

Six specimens of a Musculium were collected by the writer during past season in the Georges River at North Warren, Knox Co., and sent to Dr. Sterki for determination.

Musculium securis ("form or even variety," Sterki).

Collected August 17, 1913, in Georges River, North Warren. They were returned labeled as above.

MUSCULIUM WINKLEYI St.

Taken at Saco, York County, by Henry W. Winkley, and at Avon, Franklin County, by Dana W. Sweet.

Pisidium monas St.

Six specimens—one nearly full grown, others juv.—taken August 17, 1913, in Georges River, North Warren, by the writer.

Dr. Sterki, to whom the material was submitted, remarks as follows: "rather like the type from Michigan. Some examples, probably of same, though a little larger, from Aroostook Co. (Nylander)."

PISIDIUM PUNCTATUM var. SIMPLEX St.

Two specimens, almost full grown, taken by the writer in George River, North Warren, Aug., 1913.

PISIDIUM VARIABILE var. CICER Pr.

Eleven immature specimens taken at same time and place as above.

PISIDIUM MINUS (Adams).

A few specimens taken by the writer in Black River, Warren, Knox Co., season of 1909, and in Mill River, Thomaston, 1909 and 1910.

PISIDIUM ABDITUM VAR. LACTEUM St.

Two live specimens and a few single valves taken in Georges River, North Warren, season of 1913.

PISIDIUM SPHAERICUM St.

About twenty specimens, mostly immaculate, a few nearly full grown, taken Aug., 1913, in Georges River, North Warren.

AMNICOLA SCHROKINGERI Frauenfeldt.

Collected by Rev. Henry W. Winkley, at Saco, York county.

Lymnæa desidiosa var. plica Lea.

Collected in Buckfield, Oxford County, by John A. Allen.

PLANORBIS HIRSUTUS Gld. (= albus Müll) and P. DEFLECTUS Say.

Were inadvertently omitted from my published list. The former has been reported from Aroostook, Knox and Penobscot counties; the latter from Aroostook, Knox, Oxford and Penobscot counties.

VERTIGO NYLANDERI St.

Woodland, Aroostook Co. (Nylander). See NAUTILUS, Vol. XXII, p. 107.

## STUDIES IN NAJADES.

BY DR. A. E. ORTMANN.

(Continued from Vol. XXVII, p. 91.)

Fusconaja askewi (Marsh). (See: Quadrula a. Simpson, 1900, p. 786.)

A number of specimens, among them males, sterile and gravid females, from Sabine River, Logansport, De Soto Par., Louisiana, were received from D. S. Frierson, mostly collected on August 1, 1912, but one gravid female was collected on September 21.

In all females (altogether eleven) all four gills had marsupial structure, and in five gravid ones all four gills were charged. But in one gravid individual only the outer gills contained glochidia; but the inner gills had distinctly marsupial structure. Since there were placentæ and fragments of them in the suprabranchial canals and the cloaca cavity, this specimen was caught in the act of discharging.

The breeding season probably ends in August, but the gravid specimen, with glochidia, collected on September 21, is remarkable. It